SYSTEMS AND METHODS FOR DETECTING IONIZING RADIATION WITH AN IMAGING SYSTEM

Abstract of Disclosure

A radiation imaging system comprising a scintillator, an imager array, and a lamination layer. Lamination layer bonds and optically couples scintillator to imager array. Lamination layer is comprised of a lamination material that is substantially free from void spaces. Radiation imaging system fabrication comprises the steps of disposing lamination layer between a light imager and a scintillator to form a subassembly. Light imager comprises imager array, an imaging plate surface and a plurality of contact pads. Additional steps include subjecting subassembly to a vacuum; heating subassembly to a bonding temperature, exerting a bonding force on subassembly, maintaining the vacuum, the bonding temperature and the bonding force until light imager is bonded to the scintillator and the lamination layer is comprised of lamination material that is substantially free from void spaces.

Figures